

Prevention and Management of Low Back Pain

Sponsored by
United States Army
Physical Therapists



Outline

- Introduction & Quick Anatomy
- What is Low Back Pain?
- What Can I Do to Help?
- What Should I Avoid?
- Who Typically Does Best?
- What Should I Do if I Don't Improve?
- How Can I Minimize Recurrence?
- Quiz/Conclusion

8 Out of 10 People Suffer from Low Back Pain



Diagram from Ft Hood Graphics

Good News!

If you stay active and
continue your daily tasks -
most people with low back
pain have a quick recovery
rate!

Quick Anatomy Lesson



Pictures from Netter

A Strong System That Works Together!

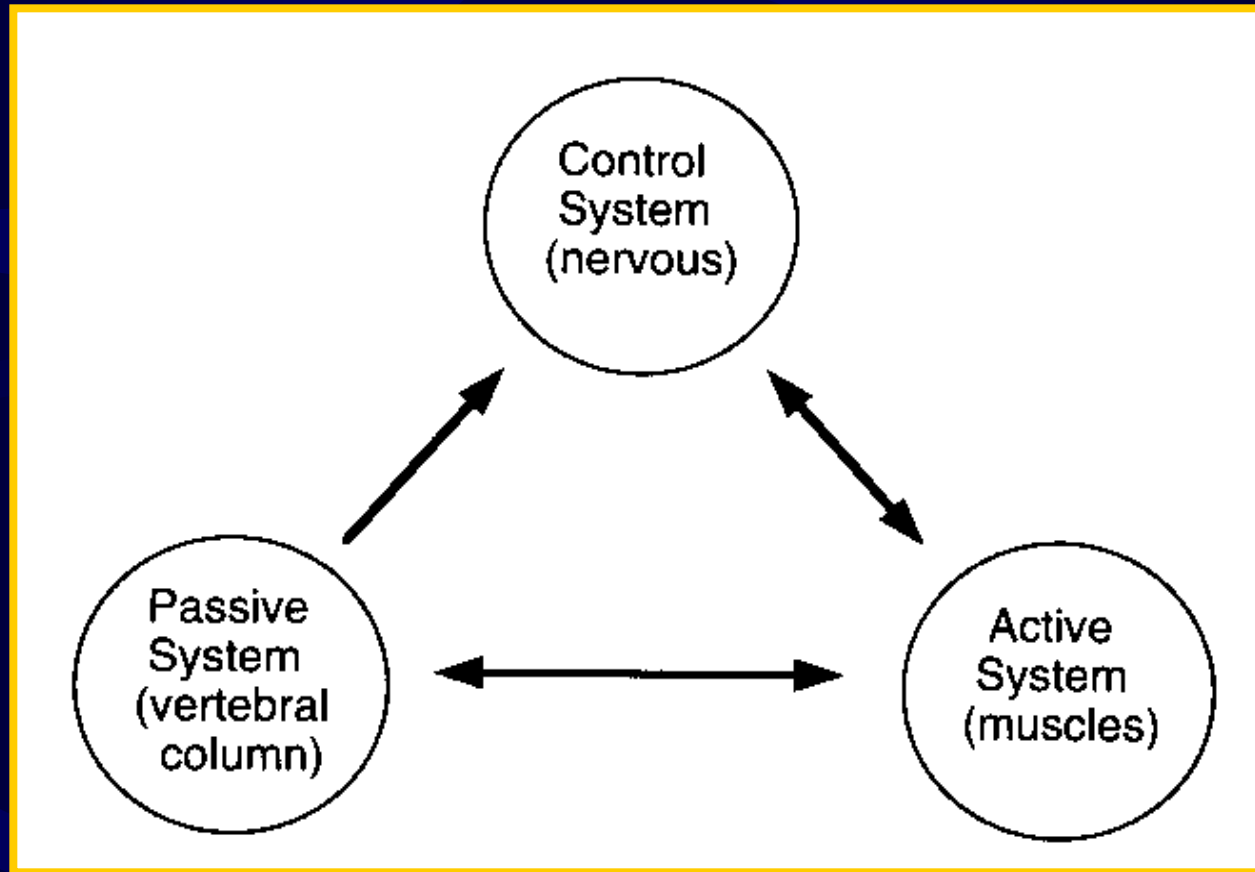


Diagram from Panjabi

What is *PAIN*?

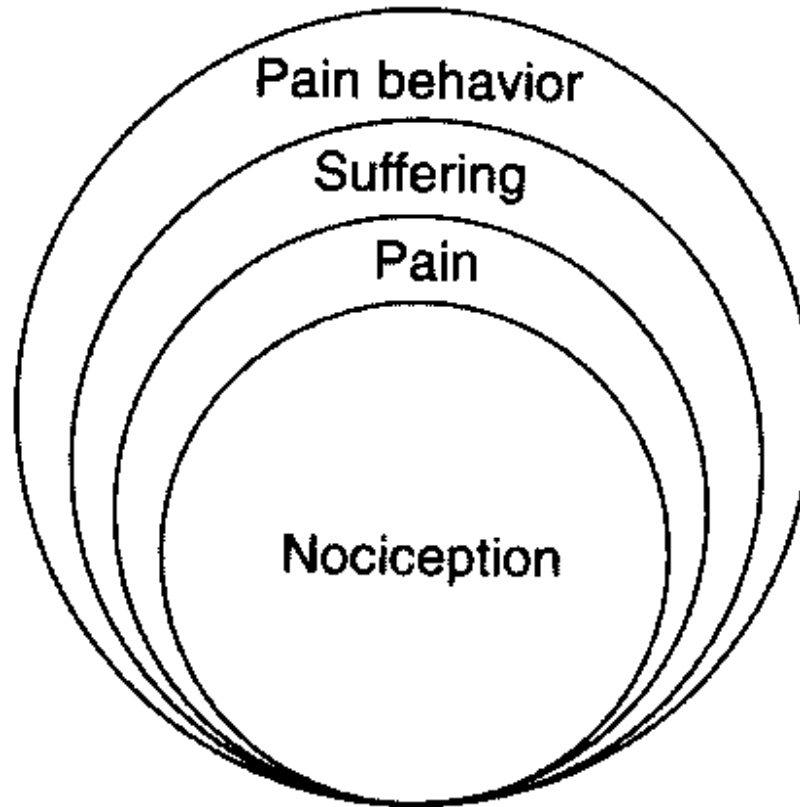
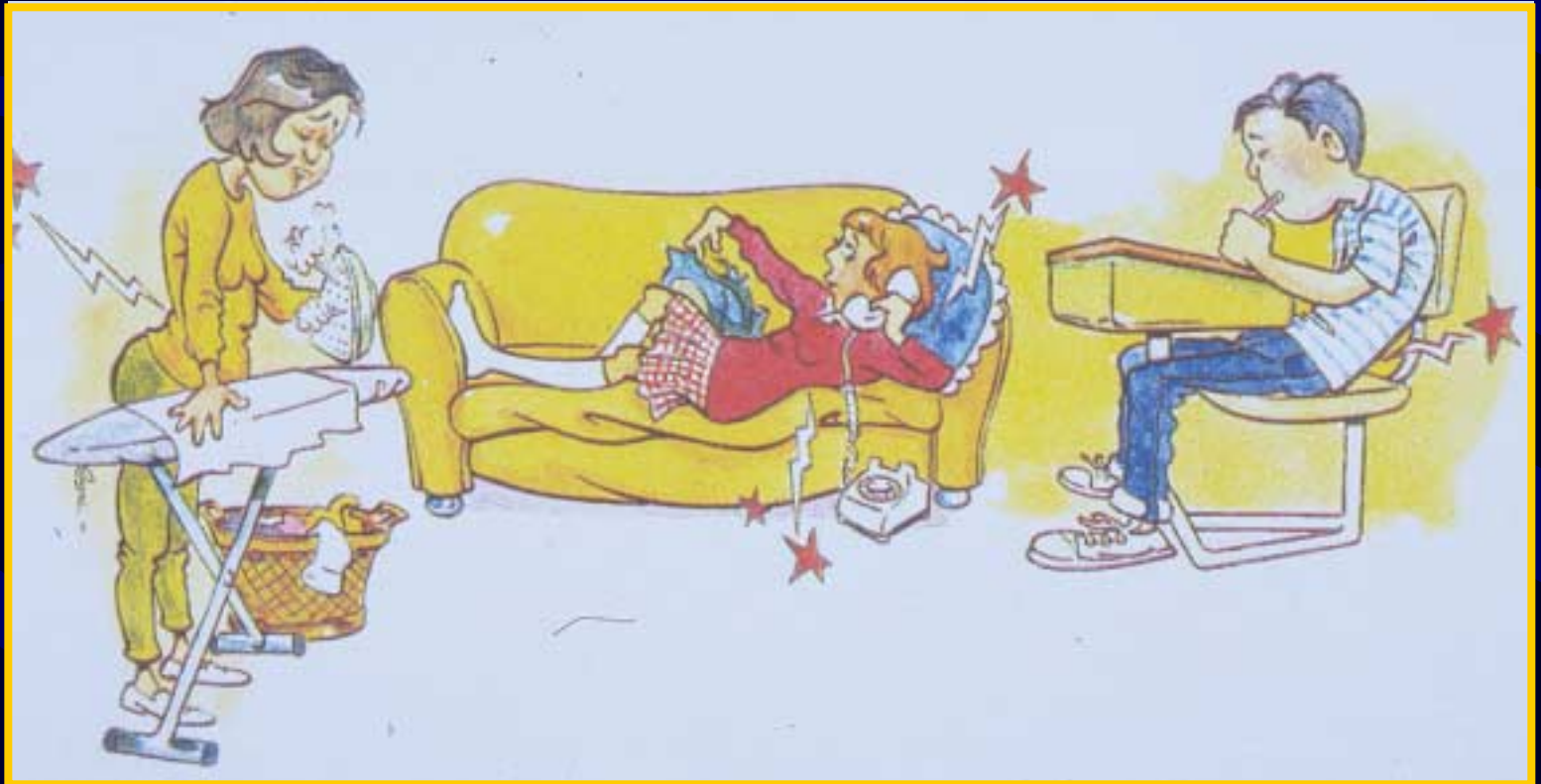


Diagram from Waddell

So, What Causes Back Ache?

- Most back pain is a mechanical problem
- It is a movement disorder of the musculoskeletal system
- Back pain is a symptom - NOT A DISEASE!
- Basically your back is not moving and working as it should - it is out of condition like a car engine that needs tuned.

Can You Think of Some Activities That May Have Aggravated Your Back?



Most Low Back Pain Can Be Attributed To:

- Poor Posture
- Improper Body Mechanics
- Faulty Living and Working Habits
- Loss of Flexibility
- General Decline in Physical Fitness

As Beetle Knows Stress and Depression Can Add to Low Back Pain!

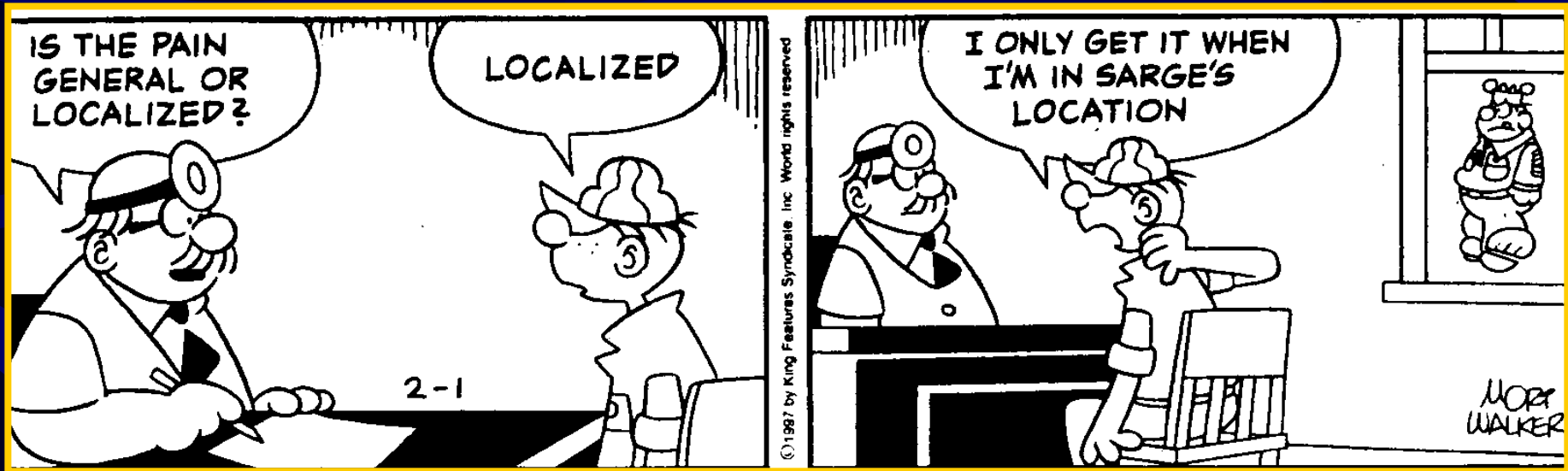
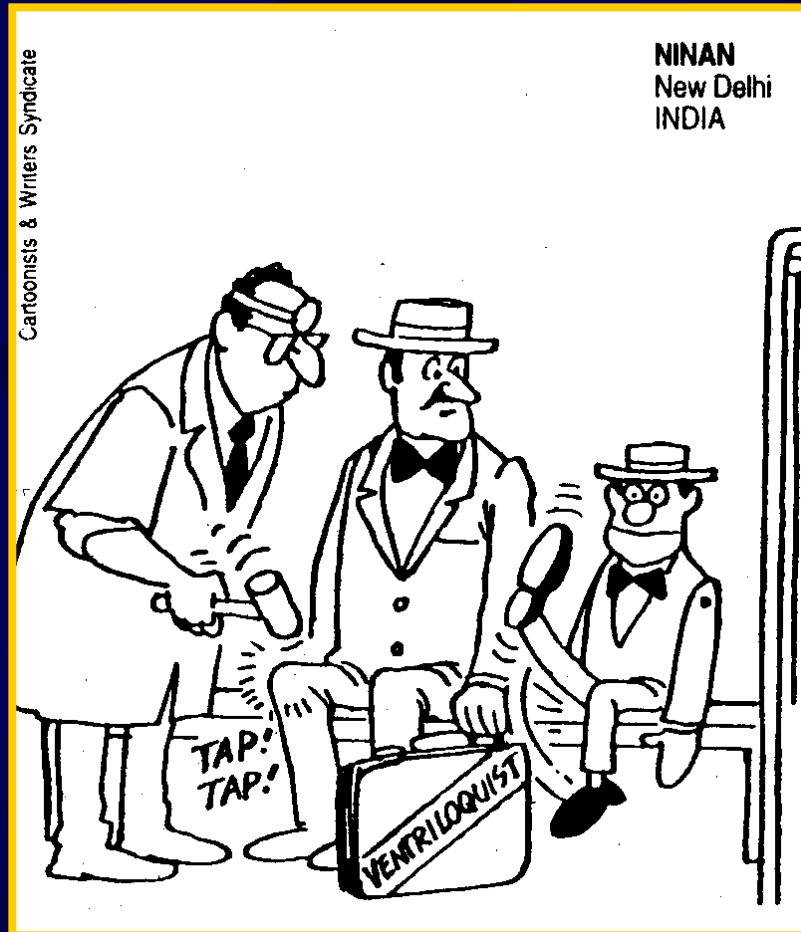


Diagram from Beetle Bailey Cartoon

How do I know that I am not one of the few with a serious problem?



Stretch Break

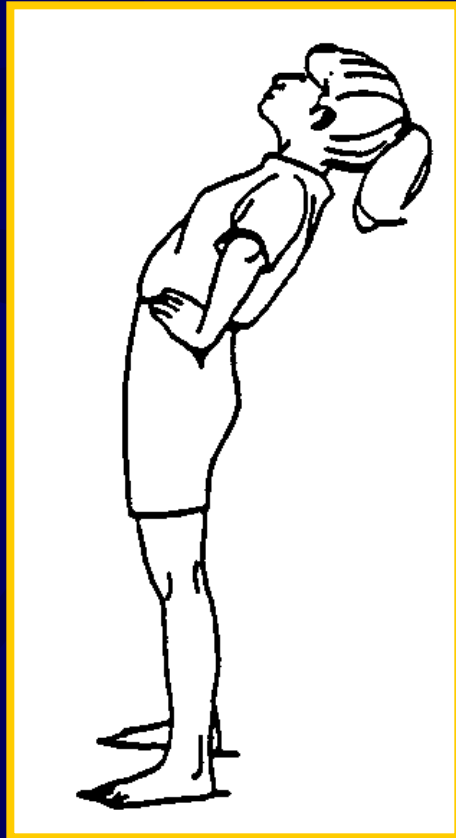


Diagram from VHI

What Can I Do to Help?

- Staying Active
- Posture
- Body Mechanics
- Mobility Exercises
- Strengthening Exercises
- Ice
- Follow directions given to you by your healthcare provider!

Staying Active

- Build up your activity tolerance
- You may need to modify your current activities slightly
- Seek help when lifting as needed



Postural Assessment

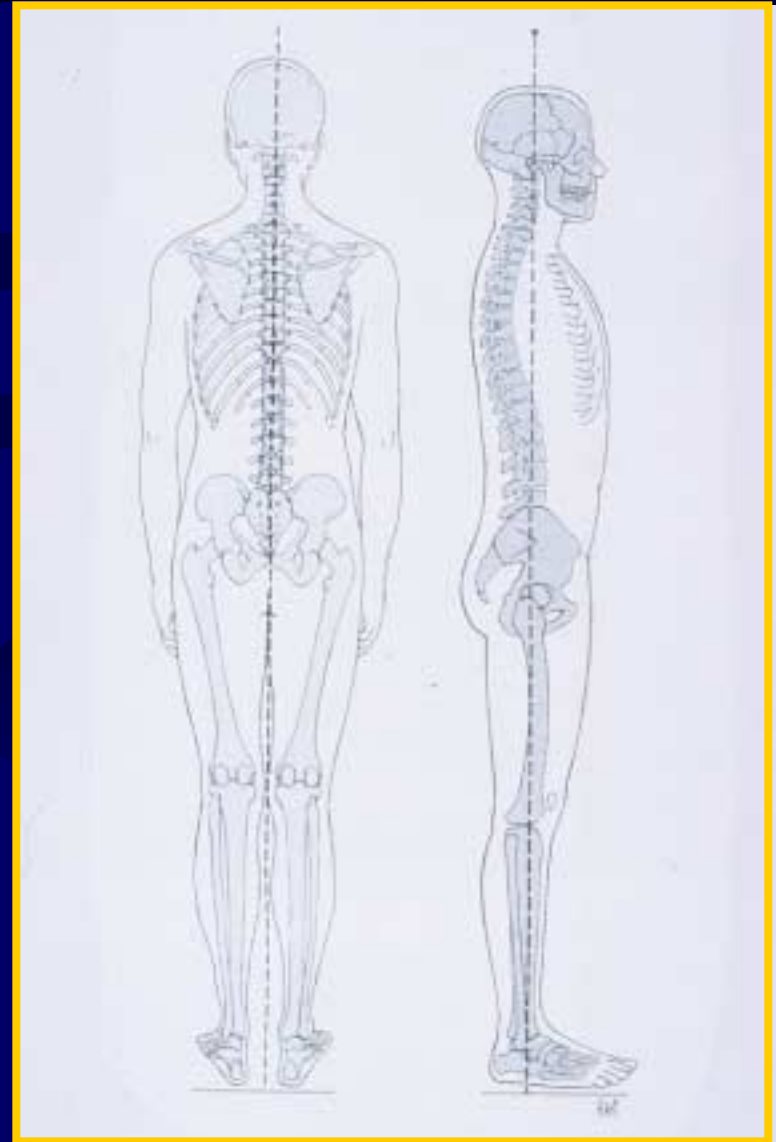
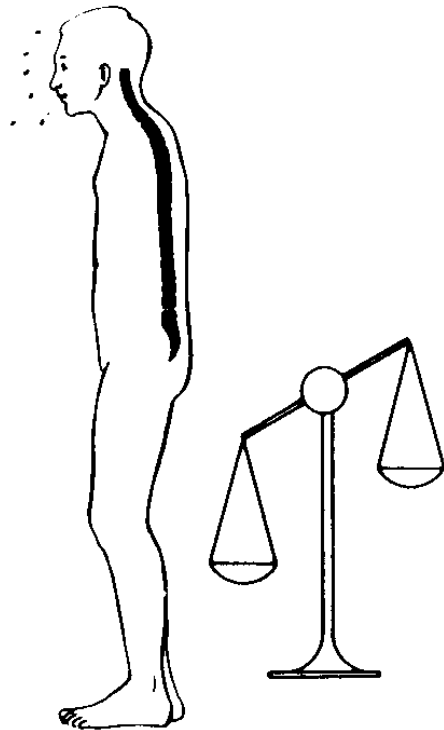
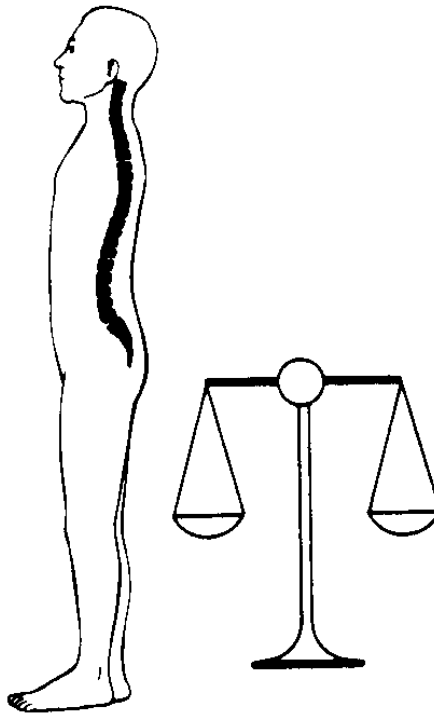


Diagram from Kendall

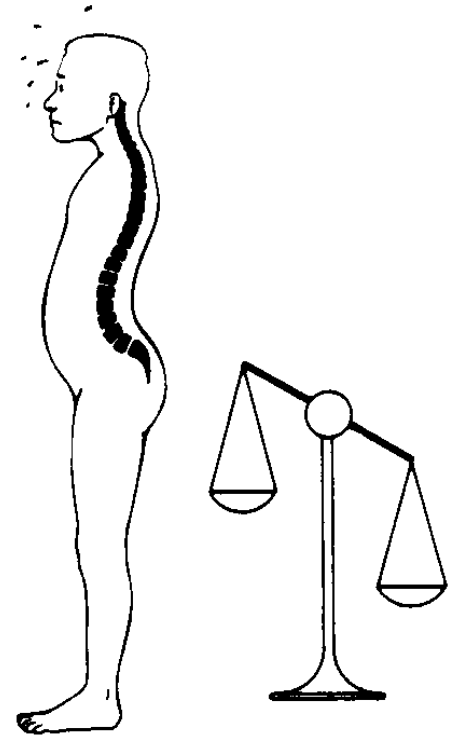
Keep Your Spine in Neutral!



Unbalanced



Balanced



Unbalanced

Diagram from Saunders

Is This Proper Posture?





Do
Activities
Affect
Our
Posture?



Y

E

S

So, How Does the American Posture Affect Us?

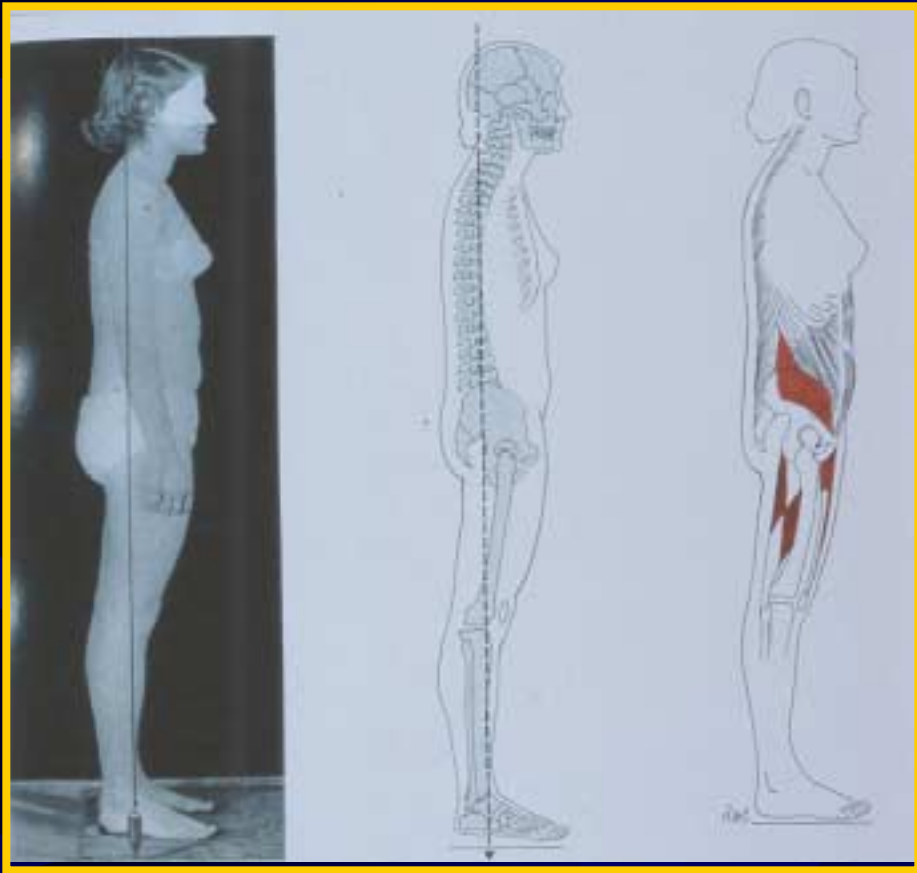




Let's Take A Posture Test Break

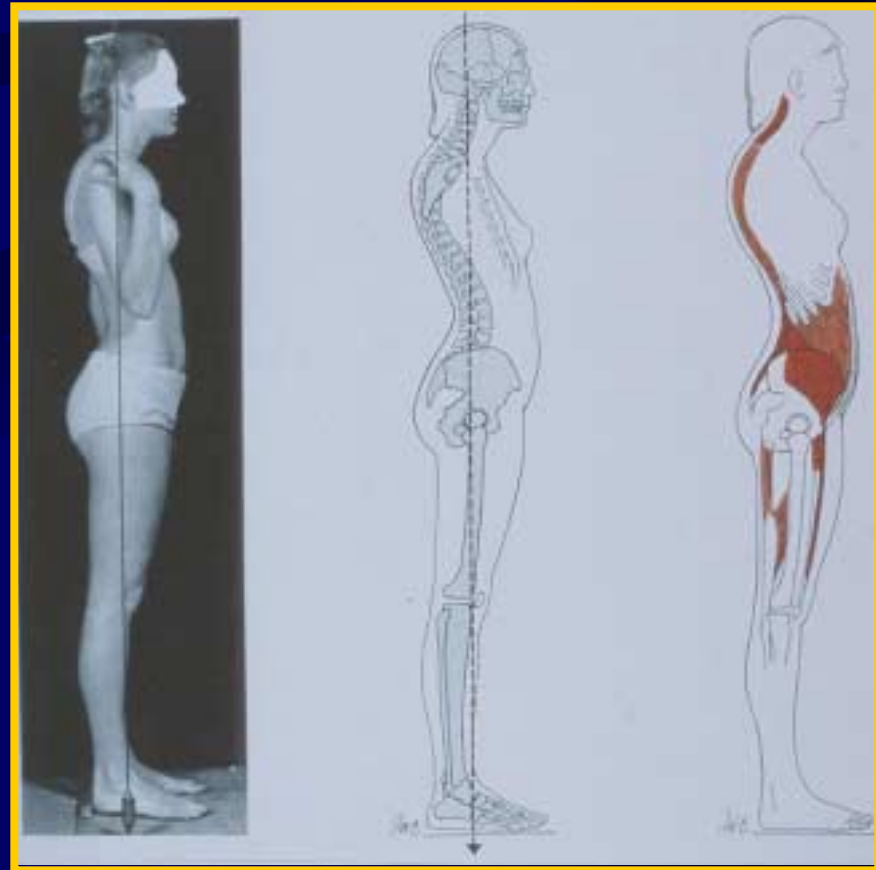
Picture from Krames

Sway Back



Flat Back

Pictures from Kendall



Remember your BACK when you lift!

B: Broad **B**ase of Support

A: Keep Spine **A**ligned

C: **C**ontract your abdominal and back muscles

K: Bend at your **K**nees

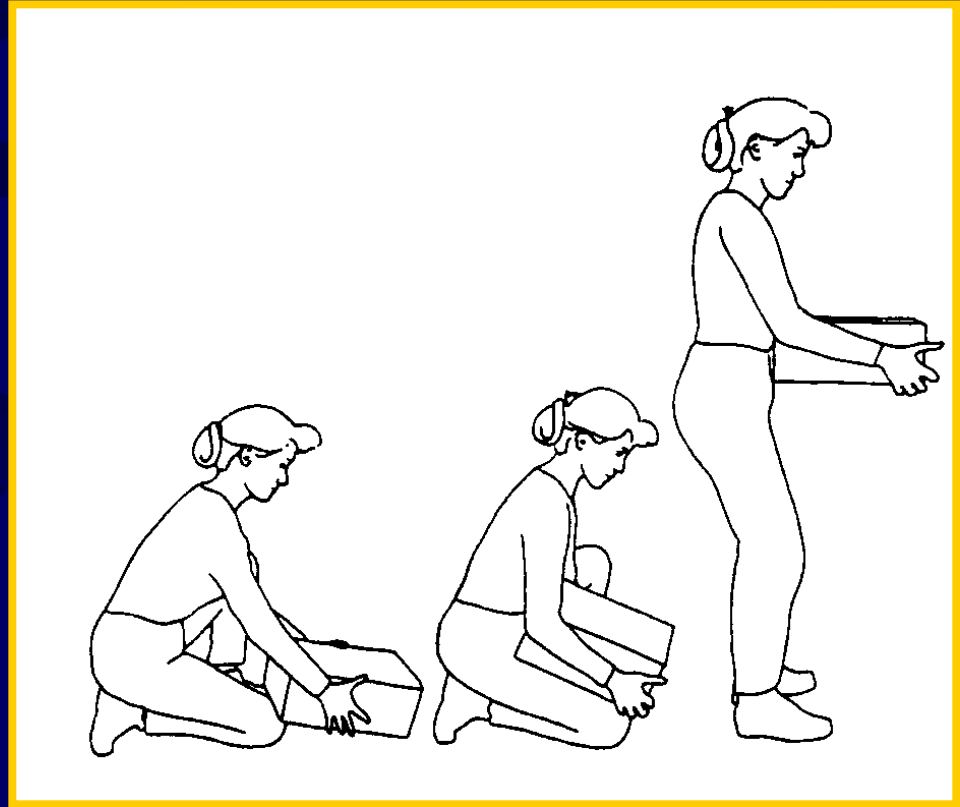


Diagram from VHI

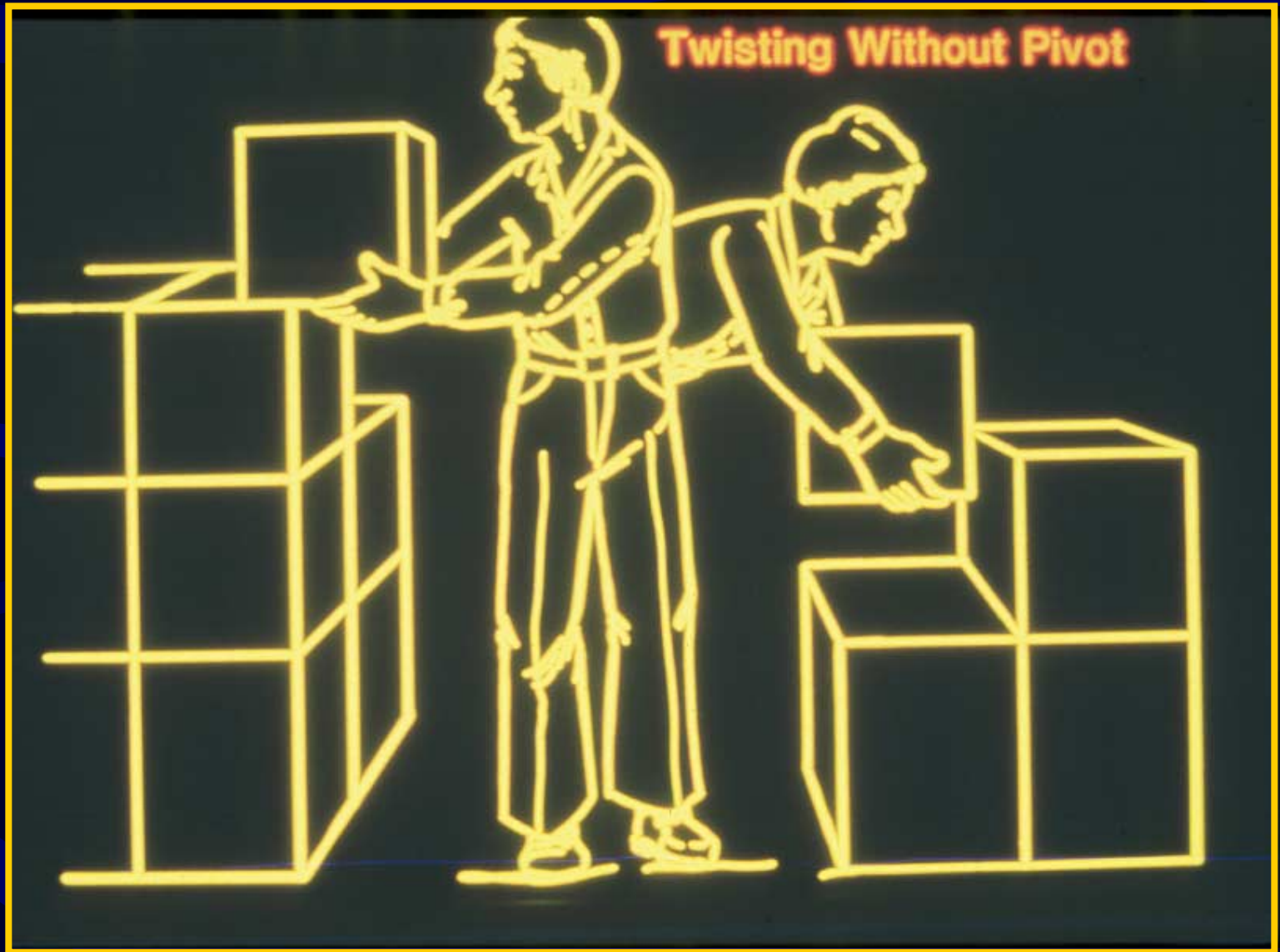


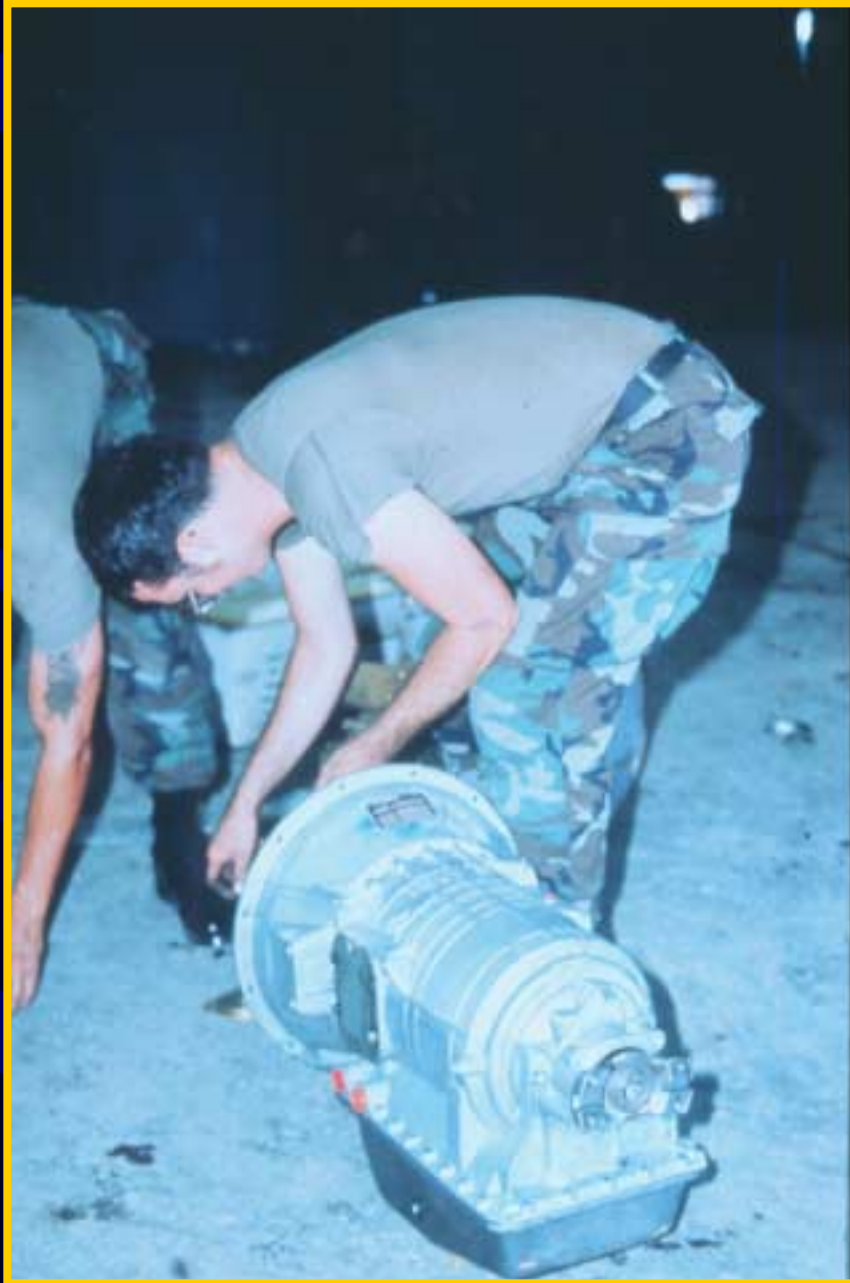
Diagram from Ft Hood Graphics



Diagram from Ft Hood Graphics



Just because
you follow the
lifting rules
part of the
time...



Doesn't Mean
You are
Home Free
From Low
Back Pain!
Everything
Counts!

Try “Golfers Lift” for items
under 5 pounds!



Diagram from VHI

Sitting & Driving

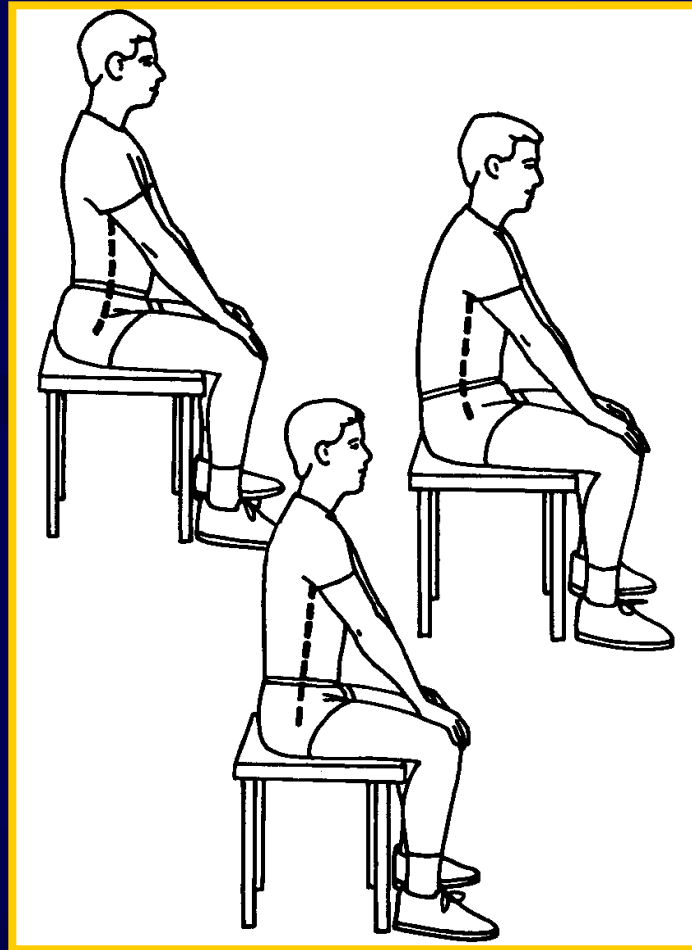
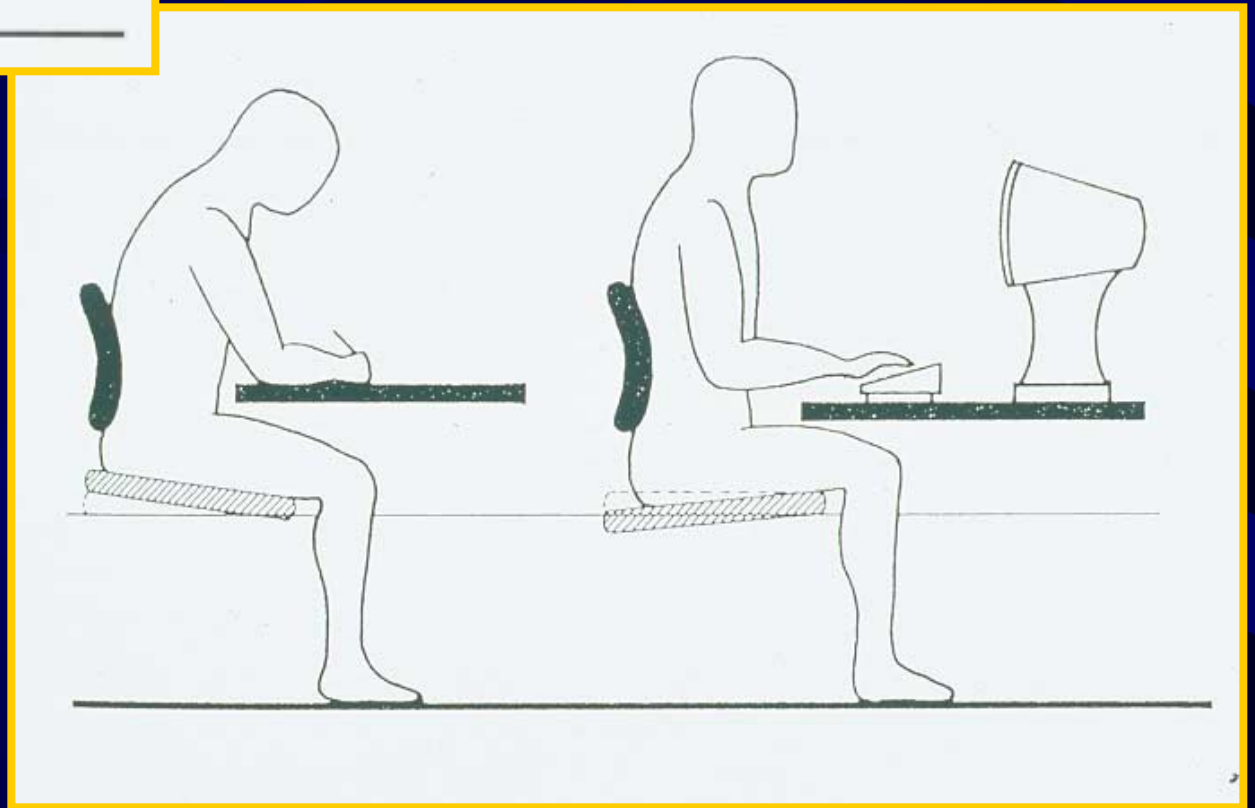
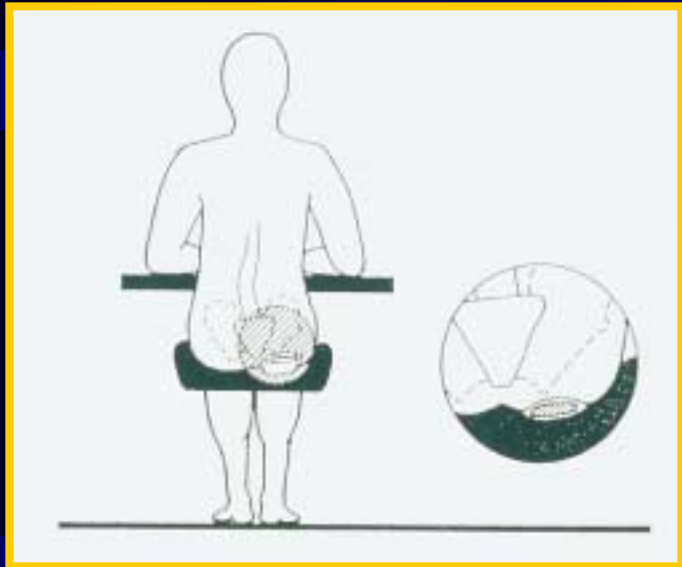


Diagram from Therapy Skill
Builders

Helpful Hints!





Lumbar Rolls



Stretch Break



Diagram from PTEX

Standing

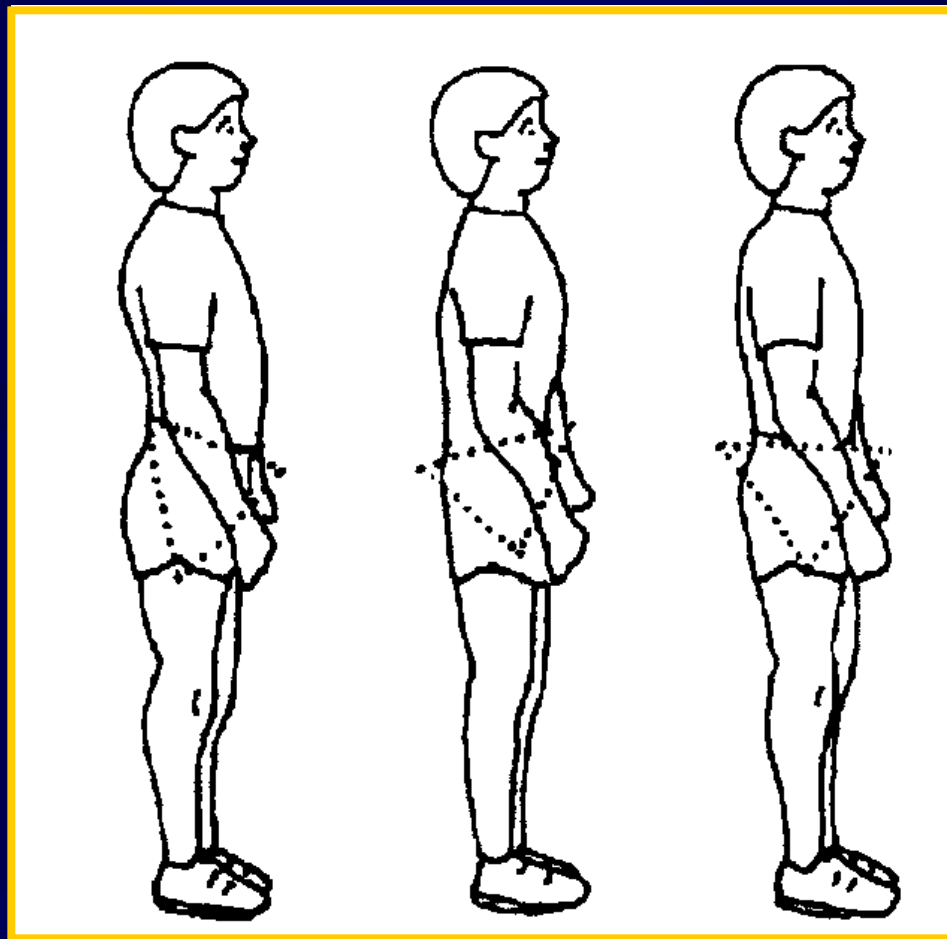
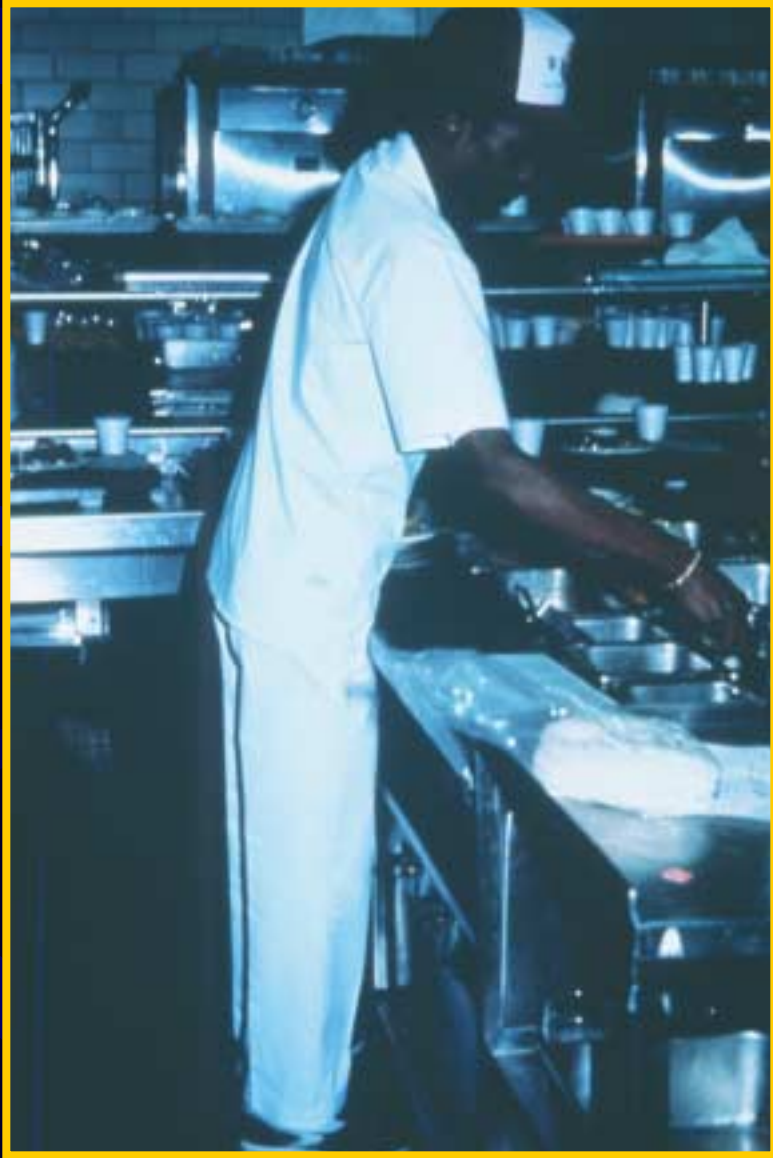
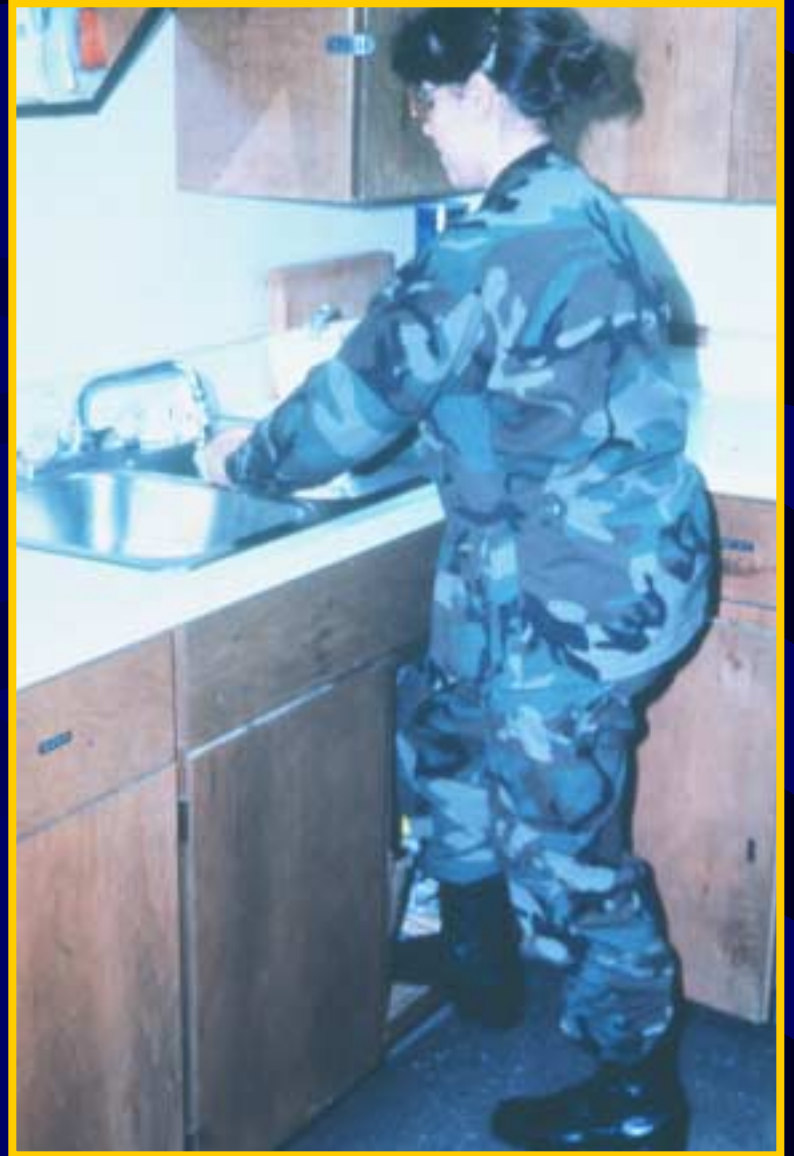


Diagram from Therapy Skill Builders

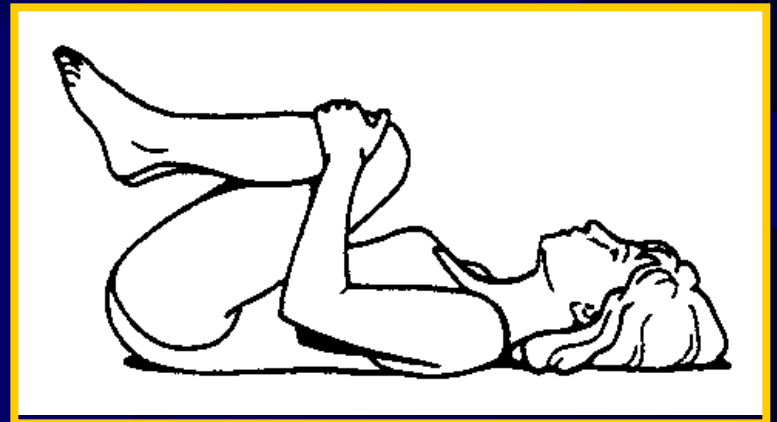
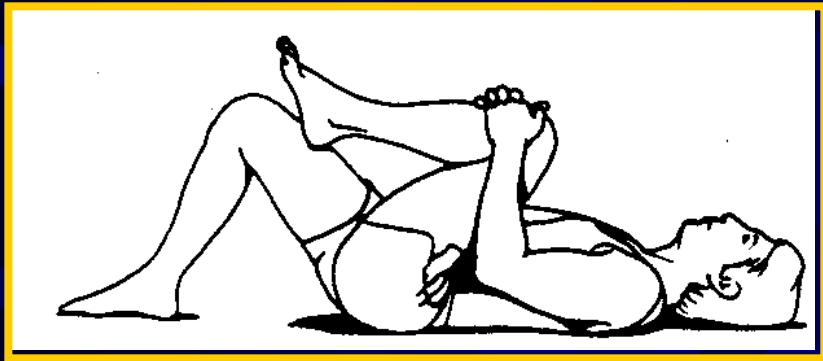


Do You
Have To
Stand For
A Long
Time?

Try
This!

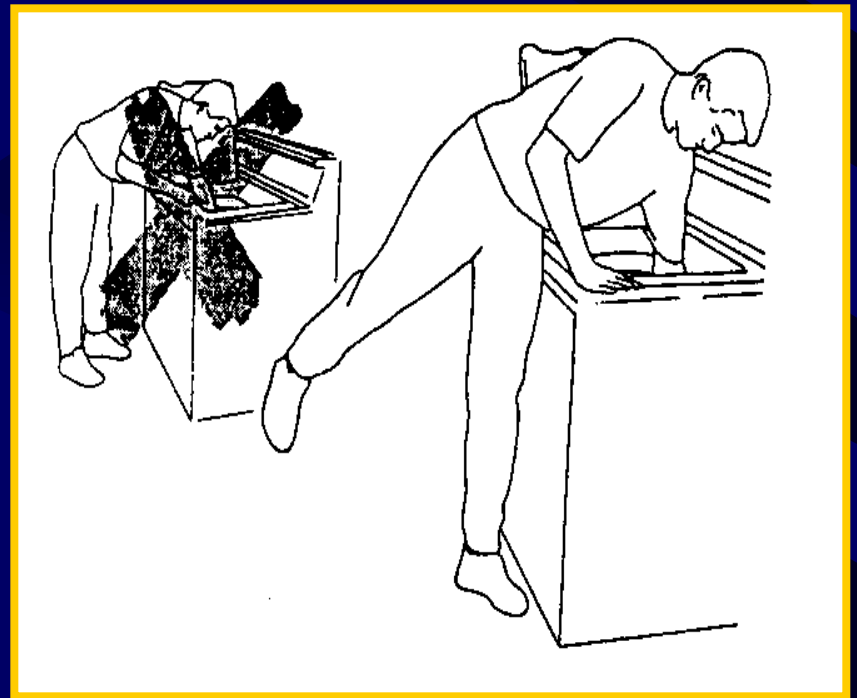


Stretch Break



Diagrams from VHI

Household Tasks



Diagrams from VHI



Can You
See the
Difference?

Let's Try This...

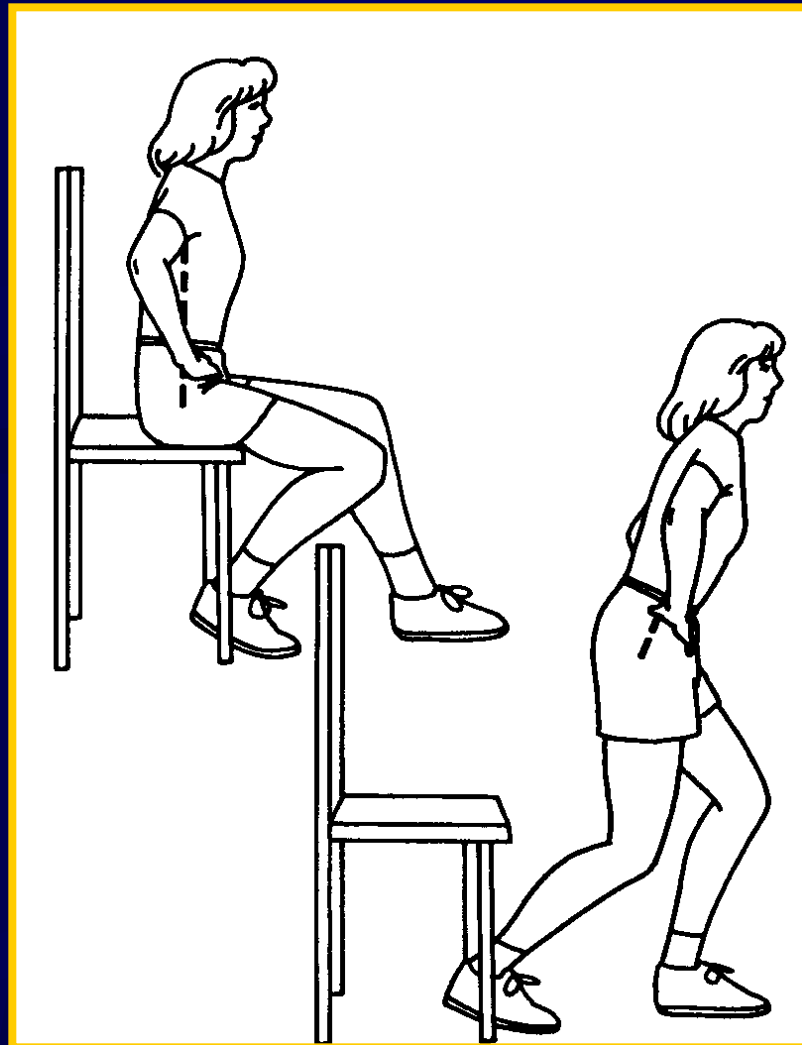
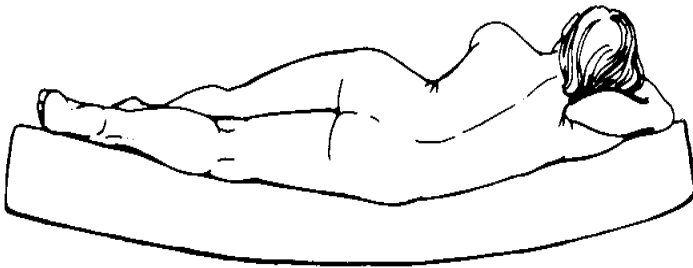
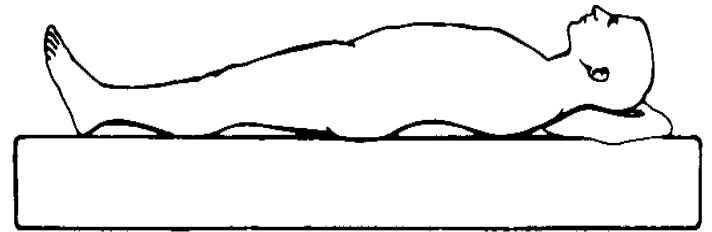


Diagram from Therapy
Skill Builders

Sleeping



Unbalanced



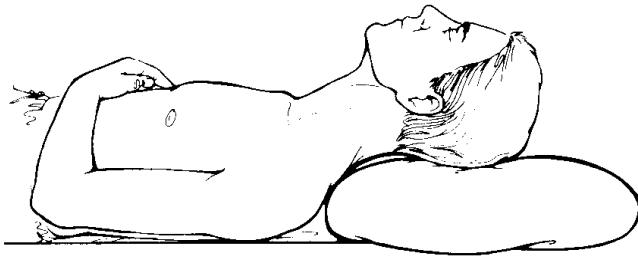
Unbalanced



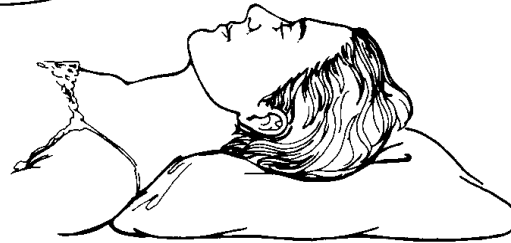
Balanced

Diagram from Saunders

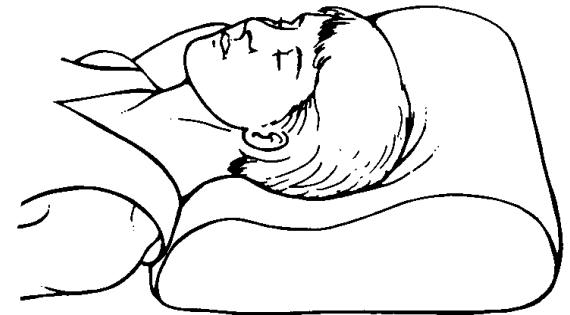
Pillow Selection



Unbalanced



Balanced



Balanced

Diagram from Saunders

Aerobic Exercise

- Increases blood flow
- Releases natural chemicals which reduce pain
- Promotes strong bones
- Develops fit muscles
- Improves your overall health



"Sorry, Kevin, but my friends have all advised me not to run with you anymore."

Cartoon from Far Side

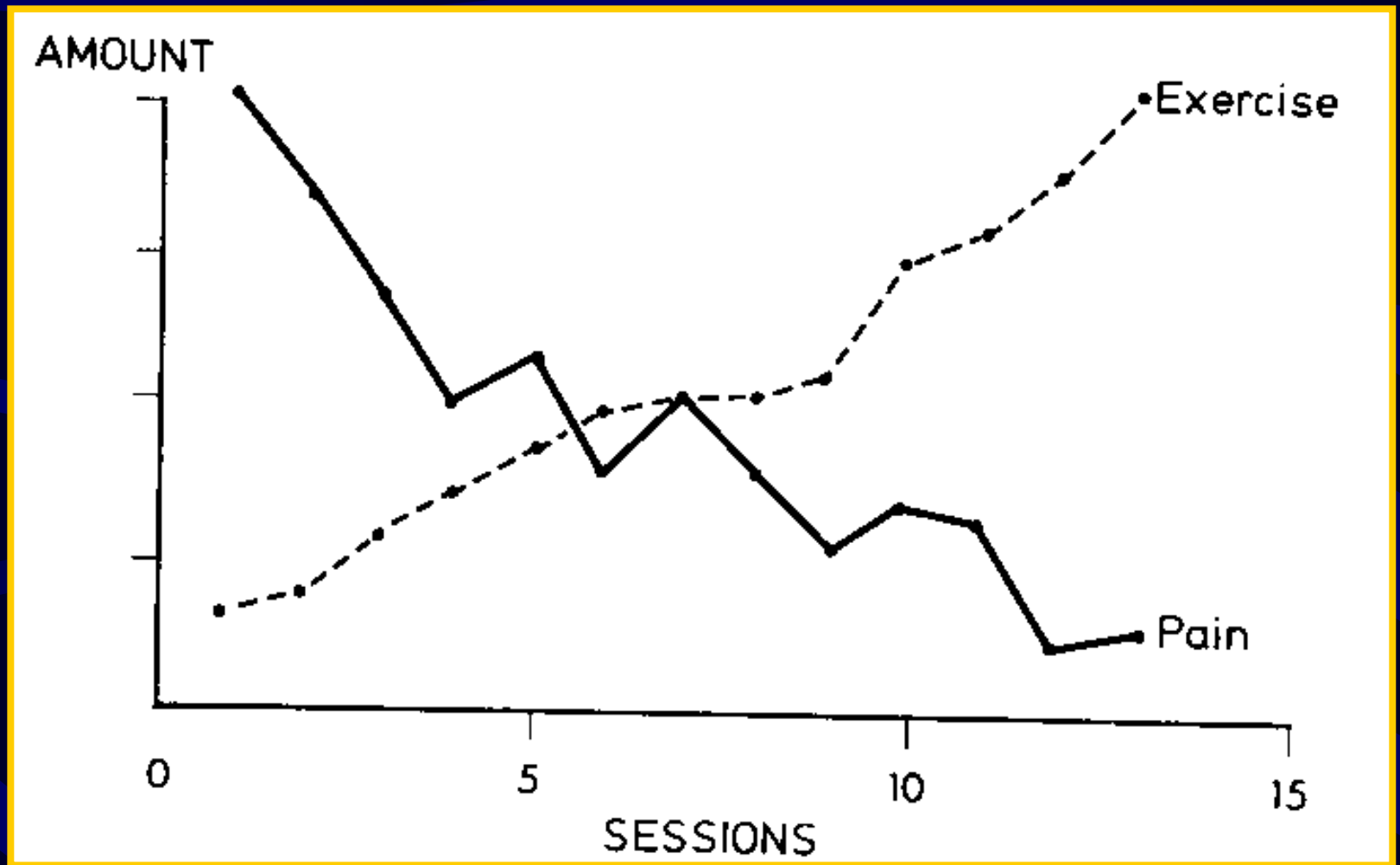


Diagram from Waddell



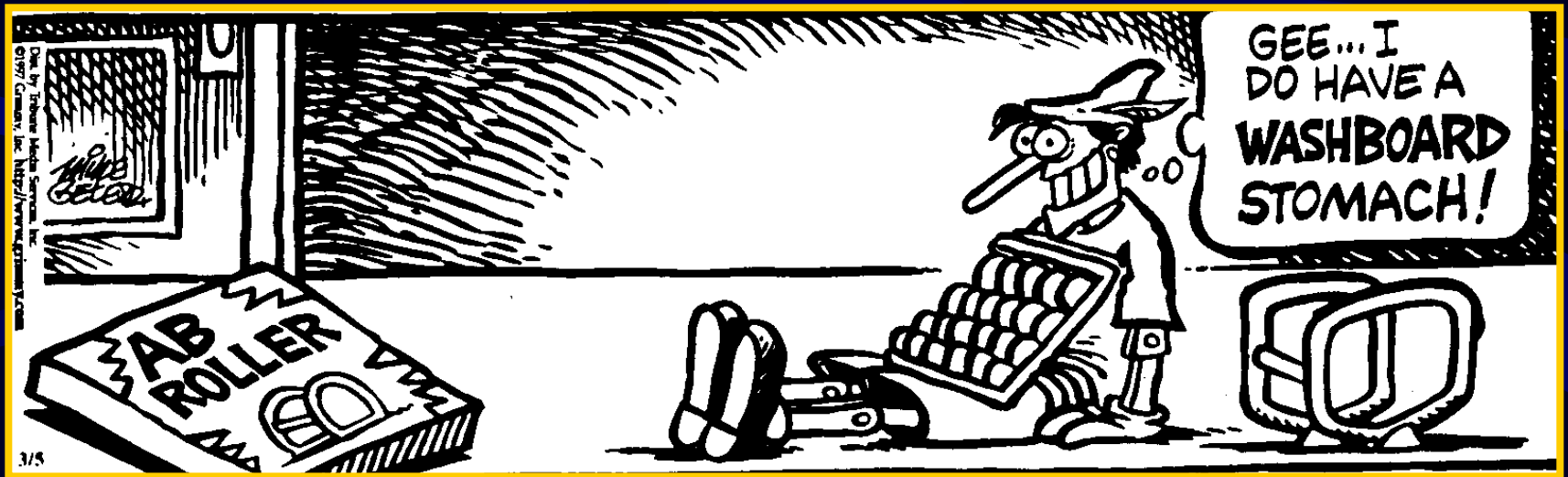
LOCHSHELDRAKE N.Y. Circa 1914







Strengthening Exercises



Lumbar Stabilization is a form of strengthening exercises that has proven to have a $>90\%$ success rate!



What Else Can I Do?

- Over-The-Counter Medications
- Sometimes Prescription Medications will be Prescribed
- Ice Packs
- Heat Packs (ONLY if ice doesn't work!)
- Manual or Manipulative Therapy

What Should I Avoid?

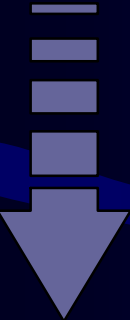
- Bed Rest
- Inactivity
- Smoking
- Prolong Sitting/Driving
- Vibration
- Stress



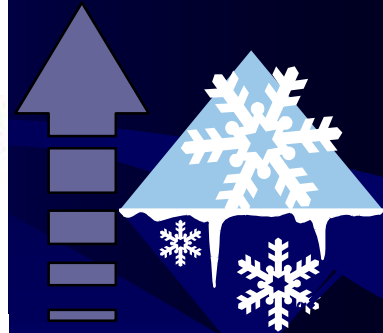
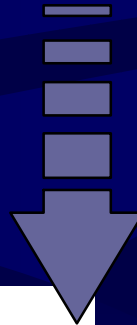
Tobacco Use Reduces Soldier Readiness



Stamina

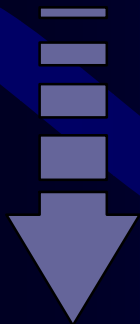


Wound Healing



Cold Weather Injuries

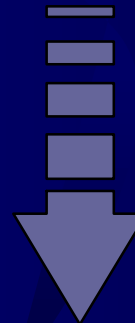
Night Vision



Poor night vision can be a BIG problem for a soldier who smokes!



Hand-Eye Coordination



Stretch Break

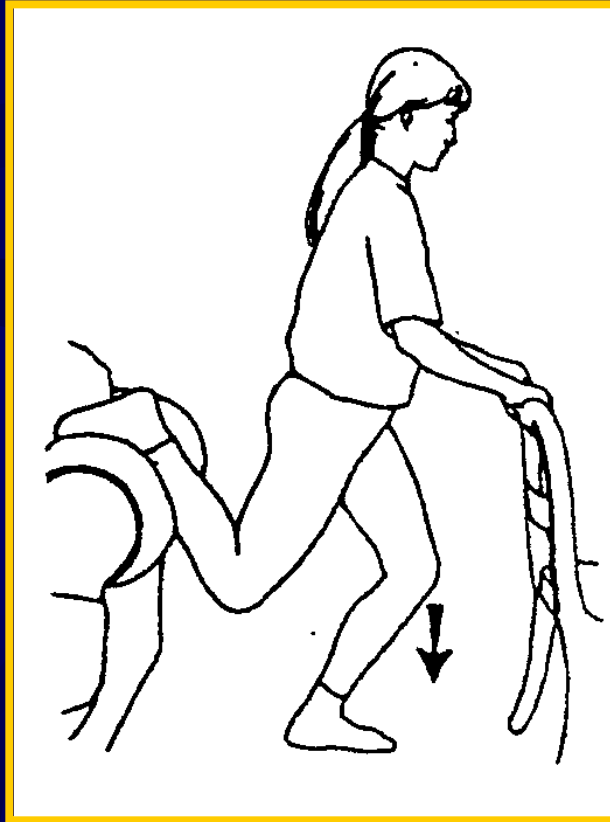


Diagram from VHI

Who Typically Does the Best?

COPERS

- Those that know the pain will get better
- Does not fear the future
- Carries on as normal as possible
- Stays positive & active

AVOIDERS

- Suffers the most
- Worries about the future
- Rests a lot and waits for the pain to get better
- Longer disability

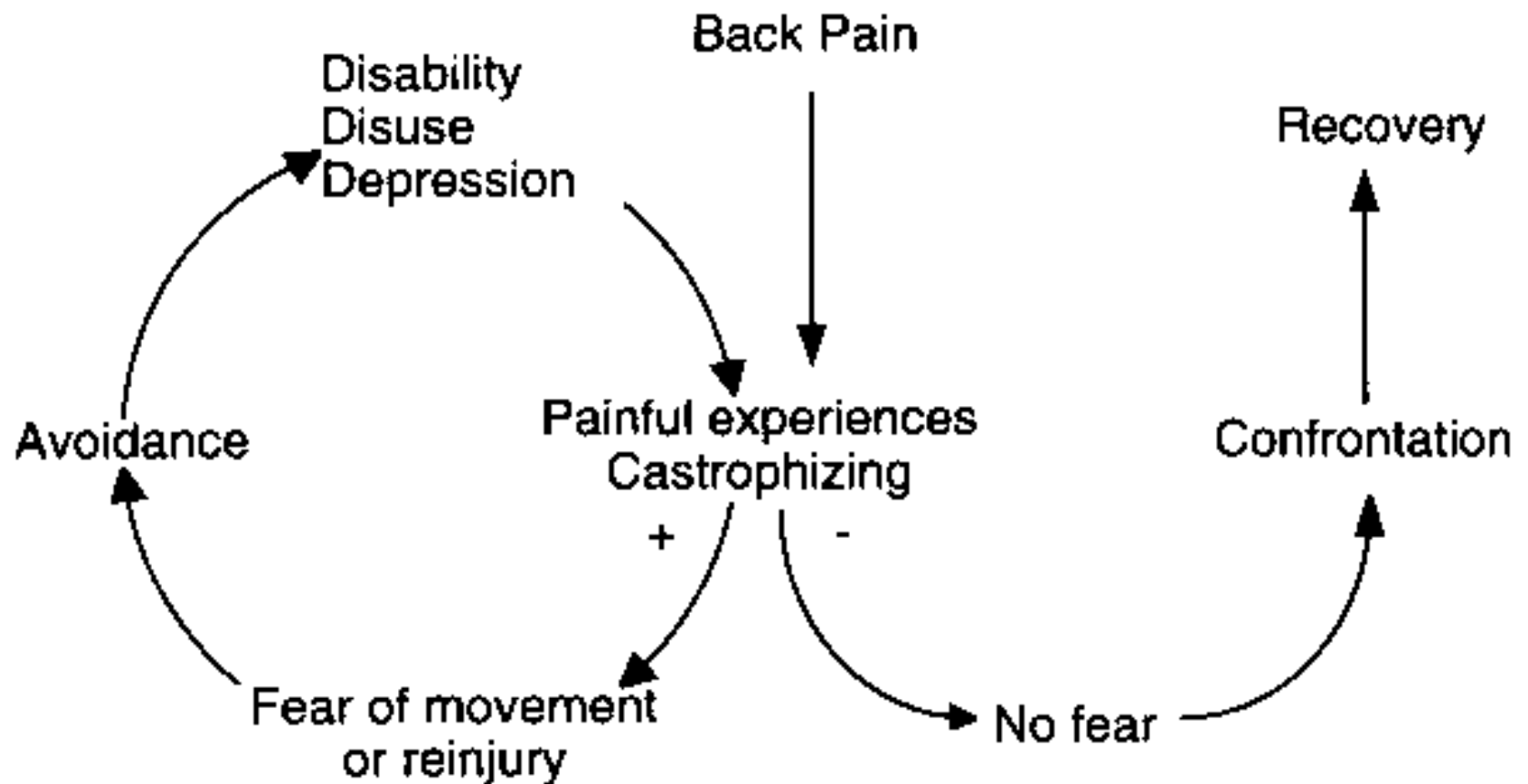


Diagram from Waddell

What Should I Do If I Do Not Improve?

- If your symptoms persist >6 weeks make sure you follow-up with a healthcare provider
- If symptoms don't resolve your healthcare provider may want to do more tests (x-rays, MRIs, Lab studies)
- If you have a change in your bowel or bladder status or you feel your foot dropping see a healthcare provider immediately!

Natural History of Low Back Pain

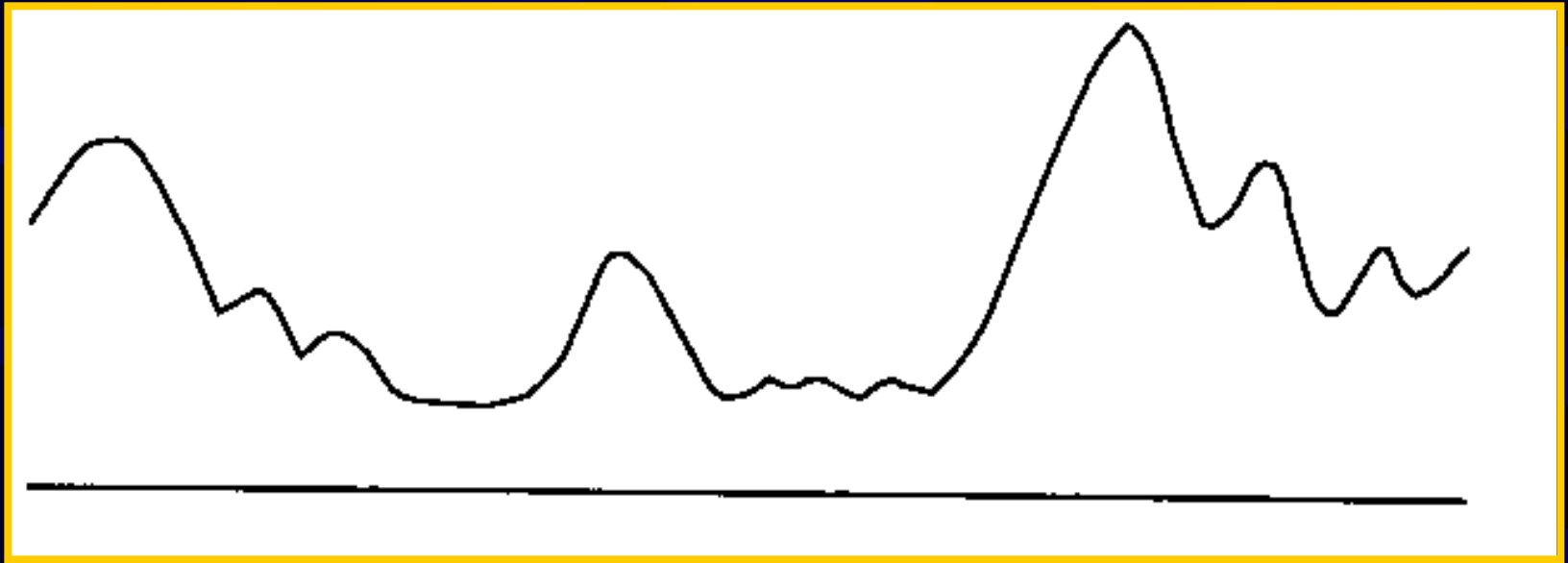


Diagram from Waddell

How Can I Minimize Recurrence?

- Stay Active
- Strengthen Your Spine
- Participate in Regular Aerobic Exercise
- Don't Smoke
- Practice Good Body Mechanics/Proper Lifting!
- Learn to Manage Stress

What's Wrong With This Picture?







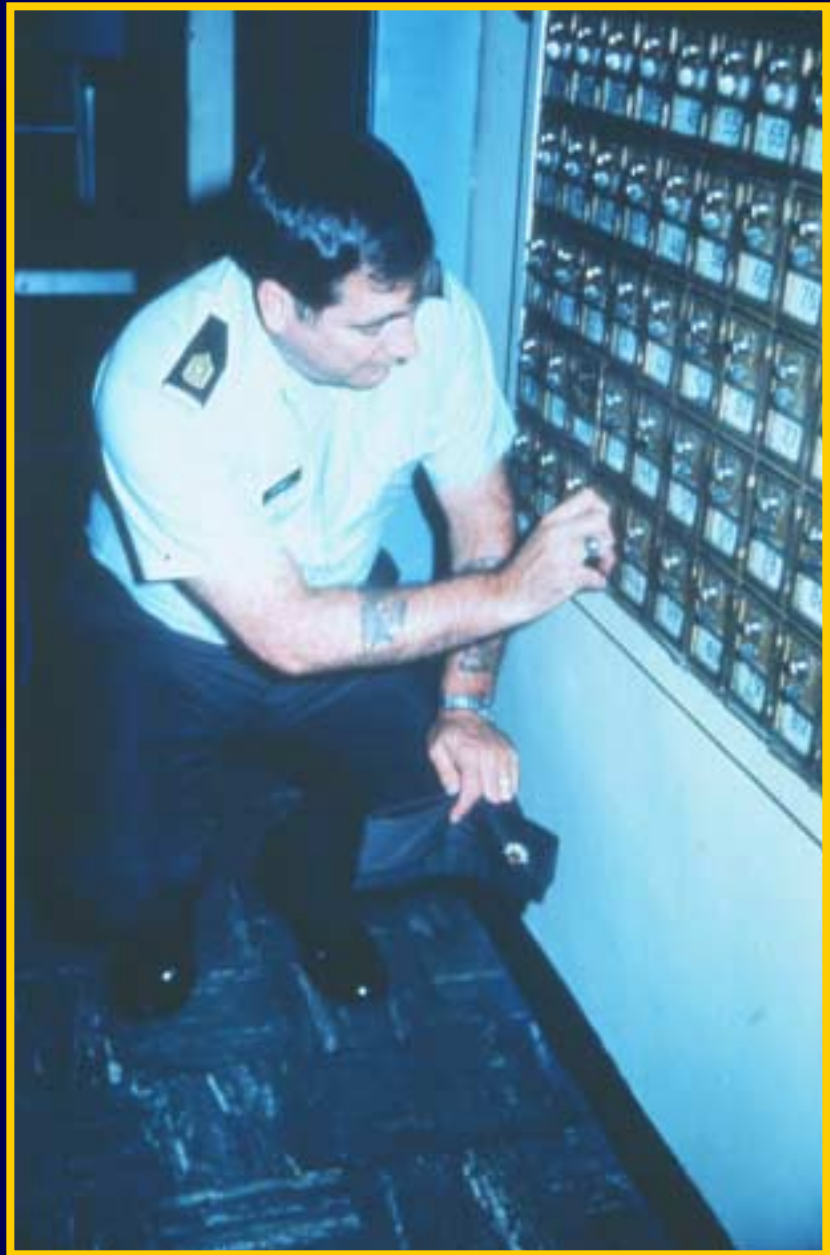


























Simple Back Ache
Should Not Cripple You
Unless You Let It!

Responsibility

Knowledge is only as good as you apply it. There is no magic cure, only persistence on your part. It is your responsibility to make yourself better - we can only guide you in the right direction!

We Can Do It!



J. M. Flaherty

1943 (100.00.00.00.00.00)



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